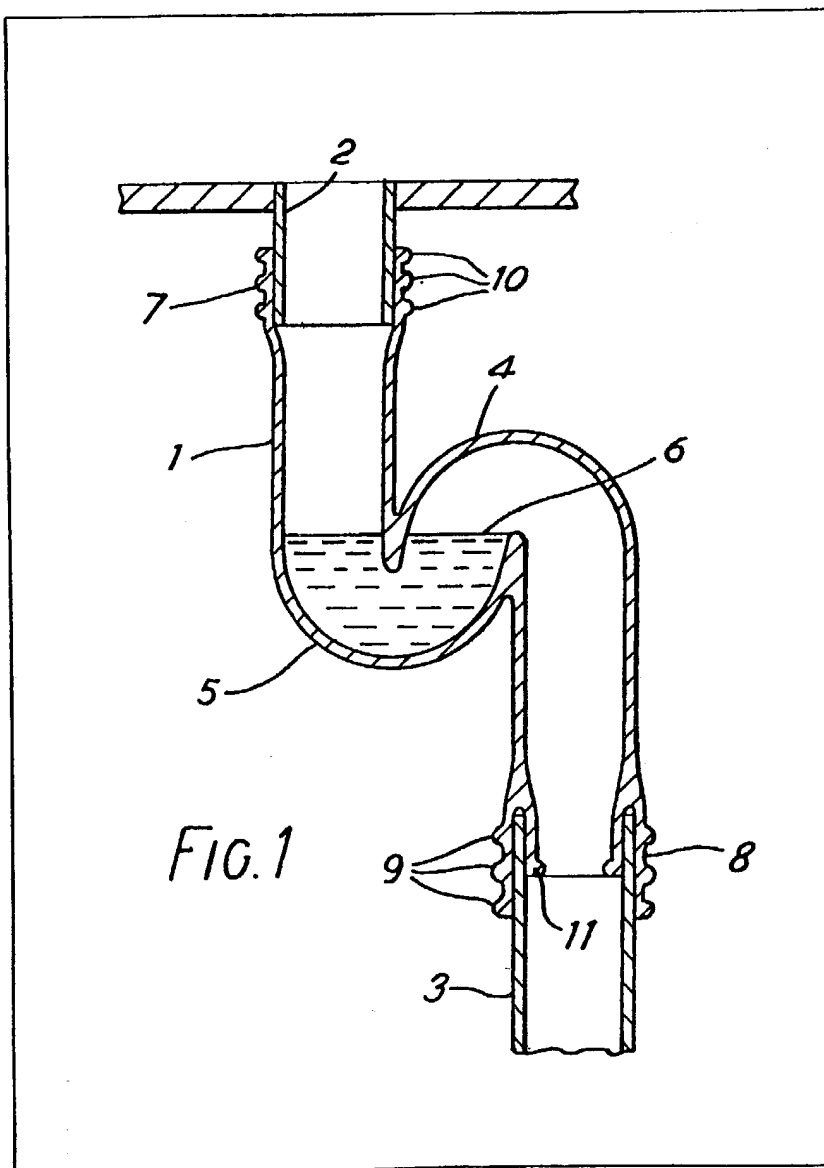


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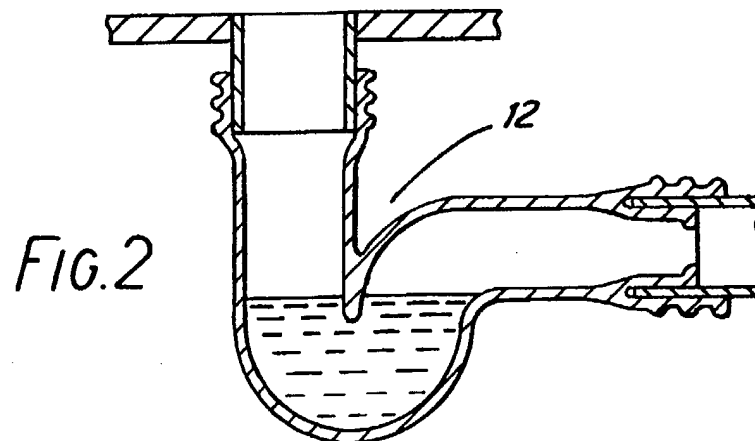
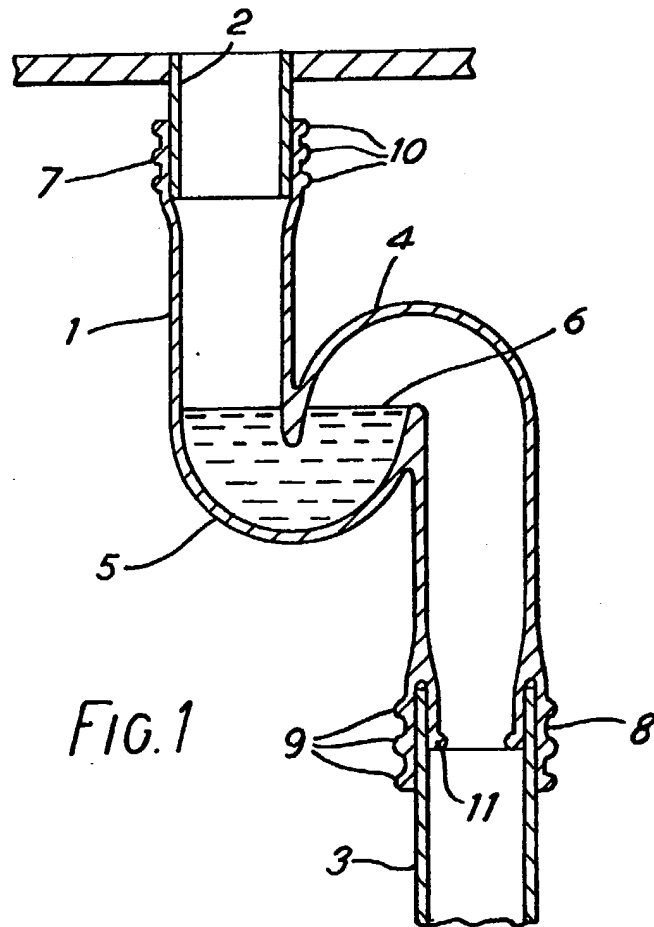
## (54) Flexible waste trap

(57) A waste trap 1 of S or P form is moulded from a resilient plastics material and comprises a passageway having a U shaped trap portion 5. The inlet and outlet ends 7, 8 of the passageway are provided with integrally moulded external ribs 9, 10 which increase the grip on the pipes 2, 3 on to which they are push fitted. An internal seal 11 is provided on the waste trap outlet to prevent leakage between the passageway end 8 and the outlet pipe 3. The waste trap is thus easily fitted and removed, is not as critical in its installation requirements as existing rigid waste traps. It may also be produced more simply than rigid waste traps involving adjustable joints and threaded pipes.



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# SPECIFICATION Flexible waste trap

This invention relates to waste traps.

It is known to provide the outlets of sinks, baths, washbasins and other liquid containing devices connected to a drainage system with waste traps situated between the outlet of the device and the drain. The purpose of such traps is to provide a water seal to prevent foul air passing up from the drain. Preferably they are provided with means for clearing the trap periodically to remove solid waste accumulated in the trap. Such traps for example involve a U-shaped bend in a pipe constructed from a rigid material, the pipe being provided with sliding or rotating joints or being provided in different sizes to accommodate the variety of differences in position between liquid container outlets and drain inlets. Such traps are thus either costly to produce and involve threaded joints and inspection covers or are simple to produce but involve just a single rigid pipe having a bend and threaded ends which must fit the positions of the container outlet and drain inlet exactly and which must be completely removed when it is to be cleaned.

The present invention provides a waste trap for a drainage system for liquid waste, comprising a passageway having an inlet and an outlet and a substantially U-shaped portion therebetween said passageway being constructed of resiliently flexible material.

The present invention further provides a waste trap having inlet and outlet unions which are adapted to be connected to pipes by push fitting the unions onto the pipes.

The present invention also extends to a drainage system including a waste trap of resiliently flexible material as described above which provides a water seal in said system.

The present invention thus provides a waste trap which may be moulded from a resilient flexible plastics material in one operation. The trap is flexible and allows less precise positioning of the pipes to which it is to be fitted than is needed for the rigid traps of the past, but is very easily fitted and removed as the trap need have no threaded joints. Any entrapped matter can thus be easily removed.

The trap may be made of rubber or other resiliently flexible material and can be used either as a replacement for existing installations or in new installations.

Preferred embodiments of the present invention will now be described by way of example with reference to the following drawings in which:—

Fig. 1 shows an S-shaped waste trap according

to the present invention.

Fig. 2 shows a U-shaped waste trap according to the present invention.

In Fig. 1 a waste trap 1 of the invention is shown connected to a sink outlet 2 and a drain inlet 3. The waste trap 1 comprises a passageway having an S-shaped portion 4, a U-shaped portion 5 of which acts as a water seal. The U-shaped portion 5 entraps liquid up to the level 6 at which it overflows into the drain 3. The ends of the passageway 7, 8 which act as unions are moulded in one piece with the S-shaped portion from a resilient plastics material, which is of sufficient flexibility to allow easy manual deformation of the trap e.g. so that the ends 7, 8 can be simply push fitted by hand over the sink outlet 2 and drain inlet 3.

In order to reinforce the grip of the passageway ends 7, 8 on the outlet 2 and inlet 3, ribs 9, 10 are integrally moulded on the outer surface of the passageway ends 7, 8. The passageway end 8 connected to the drain inlet is further provided with an internal peripheral seal 11 which overlaps the end of the drain inlet 3 which thus projects into an annular slot in the passageway end 8. This prevents leakage from the join between the passageway end 8 and the drain inlet 3. The wastetrap is thus easily fitted and removed for cleaning or inspection by hand, and is simple to produce.

Fig. 2 shows a trap of the invention in the form of a passageway forming a U-bend 12. In other respects the waste trap shown in Fig. 2 is identical with that in Fig. 1.

## CLAIMS

1. A waste trap for a drainage system for liquid waste comprising a passageway having an inlet and an outlet and a substantially U-shaped portion therebetween, said passageway being constructed from a resiliently flexible material.

2. A waste trap according to claim 1 wherein said inlet and said outlet are unions adapted to be push-fitted onto pipes to which said waste trap is to be connected.

3. A waste trap according to claim 2 wherein the outer surfaces of said inlet and outlet ends are provided with integral ribs of the resilient flexible material.

4. A waste trap according to any one of the preceding claims wherein said outlet is provided on its internal periphery with an axially projecting lip which provides an annular slot to sealingly received a pipe connected to said outlet.

5. A waste trap substantially as any herein described with reference to Fig. 1 or Fig. 2 of the accompanying drawings.